

of time for responding to the outstanding action and the fee therefor is submitted herewith.

IN THE CLAIMS

Please amend claims 1, 4, 13 and 23-27 as follows:

a1 ^{Sub 1} 1. In a process for manufacture of tufted carpets comprising steps that comprise adhering to a stitched side of a tufted primary backing a plurality of stitches of face yarn comprising a plurality of filaments by applying a thermoplastic binder comprising a softened or melted thermoplastic resin into contact with the stitched side by (a) extruding the binder with melted thermoplastic resin into contact with the stitched side or (b) heating the binder applied or present in solid form in contact with the stitched side to soften or melt the thermoplastic resin, and cooling the thermoplastic binder in contact with the stitched side to solidify the resin, the improvement comprising steps that comprise applying to a plurality of the stitches, before the resin solidifies, a stitch bind composition having a viscosity of about 0.5 to about 3000 cps and comprising a liquid component that boils or vaporizes at a temperature such that it can be removed by heating below a temperature at which the tufted backing is damaged by heat and an organic polymer component that bonds filaments of the stitches on removal of the liquid component, wherein the stitch bind composition is applied in an amount effective to provide about 0.2 to about 3 ounces of the organic polymer component or a residue thereof per square yard of the stitched side; and, after applying the stitch bind composition but before the resin solidifies, heating the stitch bind composition to

substantially remove the liquid component without damaging the tufted backing.

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a2 ~~Sub B2~~ 4. The process of claim 1 wherein the stitch bind composition has a viscosity of about 1 to about 1200 cps.

a3 ~~Sub B4~~ 13. The process of claim 1 wherein the stitch bind composition has a viscosity of about 1.5 to about 400 cps.

a4 23. A process for manufacture of carpets comprising the steps of (A) providing a tufted backing having a stitched side that has a plurality of stitches of face yarn comprising filaments, wherein filaments of a plurality of the stitches are bonded with an organic polymer which is present at about 0.2 to about 3 ounces per square yard of the stitched side; (B) contacting the stitched side of the tufted backing with a thermoplastic binder comprising a thermoplastic resin that softens or melts at a temperature below a temperature at which the tufted backing is damaged by heat or that, when softened or melted, can contact the tufted backing without such damage, wherein the binder with the thermoplastic resin thereof in softened or melted form is applied into contact with the stitched side by (1) extruding the binder with melted thermoplastic resin into contact with the stitched side or (2) heating the binder applied or present in solid form in contact with the stitched side to soften or melt the thermoplastic resin, without damaging the tufted backing; and (C) cooling the backing with softened or melted resin in contact with the stitched side to solidify the resin.

~~Sub B5~~ 24. In a process for making carpets that comprises steps comprising:

providing a tufted backing comprising a backing and having a pile side and an opposite stitched side, wherein the pile side has a plurality of tufts of face yarn that

comprise a plurality of filaments and the stitched side has a plurality of stitches of the face yarn;

a⁴ contacting the stitched side of the tufted backing with a thermoplastic binder that comprises a thermoplastic resin that softens or melts at a temperature below a temperature at which the tufted backing is damaged by heat or that, when softened or melted, can contact the tufted backing without such damage, wherein the binder is applied into contact with the stitched side by (a) extruding the binder with melted thermoplastic resin into contact with the stitched side or (b) heating the binder applied or present in solid form in contact with the stitched side to soften or melt the thermoplastic resin, without damaging the tufted backing; and

cooling the thermoplastic binder with the softened or melted resin thereof in contact with at least the stitched side of the tufted backing to solidify the thermoplastic resin;

the improvement comprising steps that comprise:

applying to a plurality of stitches, before the softened or melted resin solidifies, a stitch bind composition that has a viscosity of about 0.5 to about 3000 cps and comprises a liquid component that boils or vaporizes at a temperature such that it can be removed by heating below a temperature at which the tufted backing is damaged by heat and an organic polymer component that bonds filaments of the stitches on removal of the liquid component, wherein the stitch bind composition is applied in an amount effective to provide about 0.2 to about 3 ounces of the organic polymer component or a residue thereof per square yard of the stitched side; and

after applying the stitch bind composition but before the softened or melted resin solidifies, heating the stitch bind composition to remove the liquid component without damaging the tufted backing.

25. A process for making carpets comprising steps that comprise:

adhering to a stitched side of a tufted backing a plurality of stitches of face yarn comprising a plurality of filaments by cooling in contact with the stitched side a binder comprising a softened or melted thermoplastic resin to solidify the resin, wherein the binder with the thermoplastic resin thereof in softened or melted form is contacted with the stitched side by (a) extruding the binder with melted thermoplastic resin into contact with the stitched side or (b) heating the binder applied or present in solid form in contact with the stitched side to soften or melt the thermoplastic resin;

applying to a plurality of stitches, before the resin solidifies, a stitch bind composition having a viscosity of about 0.5 to about 3000 cps and comprising a liquid component that boils or vaporizes at a temperature such that it can be removed by heating below a temperature at which the tufted backing is damaged by heat and an organic polymer component that bonds filaments of the stitches on removal of the liquid component, wherein the stitch bind composition is applied in an amount effective to provide about 0.2 to about 3 ounces of the organic polymer component or a residue thereof per square yard of the stitched side; and

heating the stitch bind composition, after application thereof to the stitches and before the resin solidifies, to remove the liquid of the stitch bind composition.

26. A process for making a tufted carpet comprising steps that comprise

at providing a tufted backing comprising a backing, face yarn comprising a plurality of filaments, and a thermoplastic binder in the form of a coating, fabric or fibers comprising solid thermoplastic resin that softens or melts at a temperature below a temperature at which the backing and face yarn are damaged by heat, wherein face yarn penetrates the backing and forms a pile surface comprising a plurality of tufts on one side of the backing and a plurality of stitches on an opposite, stitched side of the backing, and the thermoplastic binder is present on at least the stitched side of the backing;

applying to the stitched side of the tufted backing and in contact with a plurality of the stitches a stitch bind composition having a viscosity of about 0.5 to about 3000 cps and comprising a liquid component that boils or vaporizes at a temperature such that it can be removed by heating below a temperature at which the tufted backing is damaged by heat and an organic polymer component that bonds filaments of the stitches on removal of the liquid component, wherein the stitch bind composition is applied in an amount effective to provide about 0.2 to about 3 ounces of the organic polymer component or a residue thereof per square yard of the stitched side;

heating the tufted backing in contact with the stitch bind composition to remove the liquid component without damaging the tufted backing;

heating the binder to soften or melt the thermoplastic resin without damaging the tufted backing; and

cooling the binder with the softened or melted resin thereof in contact with the stitched side of the tufted backing to solidify the resin.

27. A process for manufacturing carpets comprising steps that comprise

providing a tufted primary backing having a pile side comprising face yarn tufts and an opposite side having a plurality of stitches of face yarn;

applying to a plurality of the stitches a stitch bind composition having a viscosity of about 0.5 to about 3000 cps and comprising a liquid component that boils or vaporizes at a temperature such that it can be removed by heating below a temperature at which the tufted backing is damaged by heat and an organic polymer component that bonds filaments of the stitches on removal of the liquid component, wherein the stitch bind composition is applied in an amount effective to provide about 0.2 to about 3 ounces of the organic polymer component or a residue thereof per square yard of the stitched side;

contacting the tufted primary backing, an additional backing and a binder comprising a thermoplastic resin that softens or melts at a temperature below a temperature at which the tufted primary backing and the additional backing are damaged by heat or that, when softened or melted, can contact the tufted primary backing and the additional backing without such damage, to form an intermediate structure having binder disposed between the stitched side of the tufted primary backing and the additional backing;

heating the tufted primary backing or the intermediate structure after application of the stitch bind composition to remove the liquid component without damaging the tufted primary or additional backing;

a4 heating the binder to soften or melt the thermoplastic resin without damaging the tufted backing or the additional backing; and

cooling the intermediate structure with the thermoplastic resin in softened or melted form to solidify the resin.

Please add new claims 34-43 as follows:

a5 34. The process of claim 25 further comprising an additional step comprising contacting the stitched side of the tufted backing, the thermoplastic binder and an additional backing with the binder disposed between the stitched side and the additional backing such that the additional backing is bonded to the stitched side on cooling of the binder to solidify the resin.

35. The process of claim 34 wherein the additional backing comprises a secondary backing woven from polypropylene tapes or yarns.

36. The process of claim 34 wherein the additional backing comprises a thermoplastic binder.

37. The process of claim 34 wherein the additional backing comprises a fabric woven from polypropylene tapes or yarns with a thermoplastic binder in the form of a nonwoven fabric or fibers comprising a thermoplastic resin needled thereto.

Sub B 38. The process of claim 25 wherein the stitch bind composition has a viscosity of about 1.5 to about 400 cps.

39. The process of claim 26 wherein the thermoplastic binder is a nonwoven fabric needled to the backing.

40. The process of claim 39 wherein the backing comprises a fabric woven from tapes comprising polypropylene.